**Distributed Continuous Integration**

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Continuous integration is one of the keys to ensuring that software remains of a high quality without requiring hoards of dedicated testers.

Typically, a project following good practice will build the code base on every change and then run suites of automated tests to ensure no regression in functionality. On Mantid[1] we have a distributed team, which provides several challenges in setting up a useful C.I. system. Some of these include:

* no obvious central point of control;
* resilience against temporary lack of external network connection at a facility;
* scalability;
* support of multiple operating systems.

Our solution is based on the Jenkins[2] C.I. server and this talk will describe the approach that the Mantid team takes in providing a high-quality C.I. system that tackles the issues described above.

**References**

1. [www.mantidproject.org](http://www.mantidproject.org)
2. <http://jenkins-ci.org/>

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Key theme: Best Practice in software engineering.